CONNECTION SET-UP EXTENSION FOR RESTORATION PATH ESTABLISHMENT IN MESH NETWORKS

ABSTRACT OF THE DISCLOSURE

5   An extension to a connection setup protocol for establishment of a restoration path for a service in a mesh network involves, at a transit node along the restoration path, the steps of (1) receiving a service data structure having an identification of each link and transit node in a primary path for the service, and (2) determining whether to reserve additional protection bandwidth on an outgoing link incident to the transit node using the service data

10   structure, wherein the outgoing link is part of the restoration path. In one or more embodiments, the service data structure includes identification of the service, identification of the outgoing link, and bandwidth of the service. In some cases, the extension involves reserving the additional protection bandwidth on the outgoing link, if the transit node determines that the protection bandwidth is required, based upon knowledge of the

15   protection bandwidth already reserved on the outgoing link.